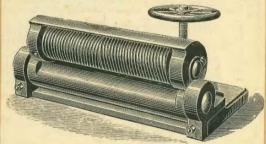
GRINDSTONE TRUM MACHINE.

We illustrate below a divice for truing up grindstones, constructed by Mr. John Jardine, of Nottingham. As the engraving shows, the machine contains a threaded roll, which is made of hardened metal. In using the device this roll is, by the handwheel and screw, brought in contact with the stone and rapidly brings it up to a true form. The device is a modification of that introduced some years ago by the Brown and Sharpe Manufacturing Company, of Providence, Rhode Island, the difference consisting in the mode of fluting the roller by which the stone is cut. In the original American machine the roller is cut with a conoriginal American machine the roller is cut with a con-



tinuous thread from end to end, and the action of this thread had a tendency to shift the stone sideways, producing an endways pressure on the bearing. To prevent this Mr. Jardine flutes the roll for half its length with a right-hand and for the other half with a left-hand thread, the side thrusts thus balancing each other. One of the great advantages of this machine is that the water need not be removed from the grindstone trough, and so the unpleasant clouds of dust which appear when a grindstone is turned in the ordinary way are avoided.